

AMENDMENTS TO THE CLAIMS

A marked-up version of the claims that will be pending following entry of the present amendments showing the amendments made herein follows. Matter that has been deleted from the claims is indicated by strikethrough or double brackets, and matter that has been added is indicated by underlining.

1-12 (Cancelled)

13. (Currently Amended) A zirconium-based alloy suitable for use in a corrosive environment where it is subjected to increased radiation, the alloy including zirconium having a quality and impurity level suitable for use in reactors, the alloy ~~comprising~~ consisting essentially of:

0.65-1.6 percent by weight Nb;

0.3-0.6 percent by weight Fe; ~~and~~

0.65-0.85 percent by weight Sn;

0.0-0.20 percent by weight Ni;

0.0-0.60 percent by weight Cr; and

the balance being Zr.

14. (Currently Amended) The zirconium-based alloy according to claim 13, ~~further comprising:~~ containing up to 0.2 percent by weight Ni.

15. (Currently Amended) The zirconium-based alloy according to claim 13,
~~further comprising~~ containing up to 0.6 percent by weight Cr.

16. (Cancelled)

17. (Previously Presented) The zirconium-based alloy according to claim 13,
wherein the alloy comprises a part of a component in a nuclear energy plant.

18. (Previously Presented) The zirconium-based alloy according to claim 17,
wherein the component comprises a part of a fuel assembly.

19. (Currently Amended) A component in a nuclear energy plant, comprising:
a zirconium-based alloy ~~comprising~~ consisting essentially of 0.65-1.6 percent by
weight Nb, 0.3-0.6 percent by weight Fe, ~~and~~ 0.65-0.85 percent by weight Sn, 0.0-0.20
percent by weight Ni, 0.0-.60 percent by weight Cr, and the balance being Zr.

20. (Previously Presented) The component according to claim 19, wherein the
component comprises a part of a fuel assembly.

21. (Previously Presented) The component according to claim 20, wherein the
component comprises a cladding tube for nuclear fuel.

22. (Previously Presented) The component according to claim 21, wherein at least a part of an inner circumference of the component comprises a layer of a material that is more ductile than the alloy.

23. (Previously Presented) The component according to claim 22, wherein the layer comprises a zirconium-based alloy having a total content of alloying elements that does not exceed 0.5 percent by weight.

24. (Previously Presented) The component according to claim 19, wherein the component comprises a cladding tube for nuclear fuel.

25. (Previously Presented) The component according to claim 24, wherein at least a part of an inner circumference of the component comprises a layer of a material that is more ductile than the alloy.

26. (Previously Presented) The component according to claim 25, wherein the layer comprises a zirconium-based alloy having a total content of alloying elements that does not exceed 0.5 percent by weight.

27. (Currently Amended) A component for a nuclear energy plant, ~~comprising~~ consisting essentially of: 0.65-1.6 percent by weight Nb, 0.3-0.6 percent by weight Fe, and 0.65-0.85 percent by weight Sn, 0.0-0.20 percent by weight Ni, 0.0-.60 percent by

weight Cr, the balance being Zr, and having a substantially uniform composition throughout.

28. (Currently Amended) The component according to claim 27, ~~further comprising: containing~~ up to 0.2 percent by weight Ni; and ~~and~~ or containing up to 0.6 percent by weight Cr.